

United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/628,574	07/29/2003	Vittorio Bruno	2993-487US SC/ip	4086
32292 7	590 03/10/2005		EXAM	INER
OGILVY RENAULT (PWC)			RODRIGUEZ, WILLIAM H	
1981 MCGILL SUITE 1600	COLLEGE AVENUE		ART UNIT	PAPER NUMBER
MONTREAL, QC H3A 2Y3 CANADA		3746		
			DATE MAILED: 03/10/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

· · · · · ·	Application No.	Applicant(s)					
	10/628,574	BRUNO ET AL.					
Office Action Summary	Examiner	'Art Unit					
	William H. Rodriguez	3746					
The MAILING DATE of this communicate Period for Reply	ion appears on the cover sheet with	the correspondence address					
A SHORTENED STATUTORY PERIOD FOR THE MAILING DATE OF THIS COMMUNICA - Extensions of time may be available under the provisions of 37 after SIX (6) MONTHS from the mailing date of this communic - If the period for reply specified above is less than thirty (30) da - If NO period for reply is specified above, the maximum statuto - Failure to reply within the set or extended period for reply will, Any reply received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b).	TION. 7 CFR 1.136(a). In no event, however, may a reply ation. 19s, a reply within the statutory minimum of thirty (3 ry period will apply and will expire SIX (6) MONTH: by statute, cause the application to become ABAN	y be timely filed 30) days will be considered timely. S from the mailing date of this communication. DONED (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed o	n .						
	This action is non-final.						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims							
4)⊠ Claim(s) <u>1-23</u> is/are pending in the application.							
	4a) Of the above claim(s) is/are withdrawn from consideration.						
5)⊠ Claim(s) <u>11-19</u> is/are allowed.							
6) Claim(s) <u>1-7,10,20,21 and 23</u> is/are reje	⊠ Claim(s) <u>1-7,10,20,21 and 23</u> is/are rejected.						
7) Claim(s) 8,9 and 22 is/are objected to.							
8) Claim(s) are subject to restriction	and/or election requirement.	·					
Application Papers							
9) The specification is objected to by the Ex	xaminer.						
10)⊠ The drawing(s) filed on <u>29 July 2003</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.							
Applicant may not request that any objection	to the drawing(s) be held in abeyance	. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the	correction is required if the drawing(s)	is objected to. See 37 CFR 1.121(d).					
11) The oath or declaration is objected to by	the Examiner. Note the attached C	Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119							
	cuments have been received. cuments have been received in App he priority documents have been re Bureau (PCT Rule 17.2(a)).	lication No ceived in this National Stage					
Attachment(s)							
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date							
3) Information Disclosure Statement(s) (PTO-1449 or PTO Paper No(s)/Mail Date 11/17/03;11/18/04.	- · · · · · · · · · · · · · · · · · · ·	rmal Patent Application (PTO-152)					

Art Unit: 3746

DETAILED ACTION

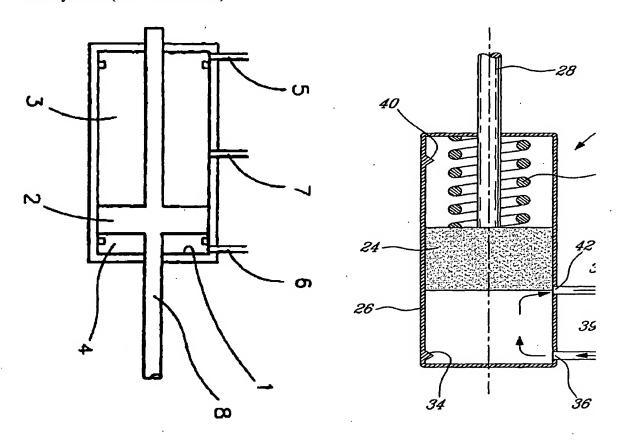
Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

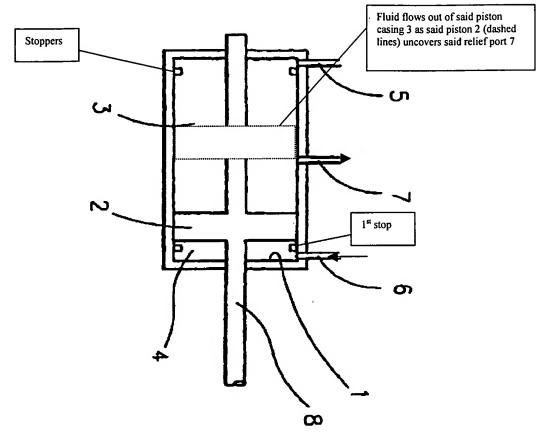
PRIOR ART

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-7, 10, 20, 21 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Harvey et al. (EP 1054164 A2).



INVENTION

Art Unit: 3746



With respect to claim 1, **Harvey** teaches an actuator comprising a movable piston 2 in a piston casing 3, the piston 2 being movable to a predetermined axial position set by a relief port 7 which is selectively openable for allowing incoming pressurized fluid to flow out of said piston casing 3 as said piston 2 uncovers said relief port 7. See particularly **Figure 1**, column 1 lines 17-25, lines 29-34 of Harvey.

Note: The desired use recitation "compressor bleed valve" does not add any structure to the claim to distinguish the invention from the prior art being used. Thus, the desired used recitation does not add any patentable weight to the claim. Any apparatus/device comprising the positively recited structural limitations (a piston, a relief port and a piston casing) of claim 1, clearly would anticipate the invention as written, as is the case with Harvey's actuator.

Art Unit: 3746

With respect to claim 2, **Harvey** teaches that the piston casing 3 has first and second opposed end portions, and wherein said relief port 7 is provided at a location intermediate said first and second opposed end portions. See particularly **Figure 1** of Harvey.

With respect to claim 3, Harvey teaches that the piston 2 is movable from one side of said relief port 7 to an opposed side thereof when said relief port 7 is closed. See particularly Figure 1 of Harvey.

With respect to claim 4, **Harvey** teaches that the actuator further comprises a control port 6 provided at a first end portion of said piston casing 3, said control port 6 being connected to a first valve operable for allowing pressurized fluid to flow into and out of the piston casing 3. See particularly **Figure 1**, column 1 lines 11-12 of Harvey.

With respect to claim 5, **Harvey** teaches that said control port 6 and said relief port 7 are in fluid flow communication via said piston casing 3 when said piston 2 uncovers said relief port 7. See particularly **Figure 1** of Harvey.

With respect to claim 6, **Harvey** teaches that the piston 2 has a first face adapted to be exposed to fluid pressure, and wherein a first stop is provided in said casing 3 to stop said piston in a first limit position in which said first face of said piston is spaced axially from said control port 6. See particularly **Figure 1** of Harvey.

With respect to claim 7, **Harvey** teaches that the piston 2 is biased against said first stop. See particularly **Figure 1** of Harvey.

With respect to claim 10, **Harvey** teaches that stoppers are provided on either sides of the relief port 7 to physically set the limit positions of the piston 2. See particularly **Figure 1** of Harvey.

Art Unit: 3746

With respect to claim 20, **Harvey** teaches an actuator comprising: a piston 2 slidable in a piston casing 3 between first, second and third positions, said second position being intermediate said first and third positions, a first port 6 provided in said piston casing 3 for allowing a pressurized fluid to be selectively supplied into said piston casing 3 in order to displace said piston 2 from said first position to said third position, and a selectively openable outlet port 7 provided in said piston casing 3 at a location corresponding to said second position, whereby when said piston 2 uncovers said outlet port 7 and said outlet port 7 is opened, the pressurized fluid flowing into said piston casing 3 via said first port 6 is permitted to flow out of said piston casing 3 through said outlet port 7, thereby causing said piston 2 to remain in said second position thereof. See particularly **Figure 1**, column 1 lines 17-25, lines 29-34 of Harvey.

Note: The desired use recitation "compressor bleed valve" does not add any structure to the claim to distinguish the invention from the prior art being used. Thus, the desired used recitation does not add any patentable weight to the claim. Any apparatus/device comprising the positively recited structural limitations (a piston, a relief port and a piston casing) of claim 20, clearly would anticipate the invention as written, as is the case with Harvey's actuator.

With respect to claim 21, **Harvey** teaches that the first port 6 and said outlet port 7 are in fluid flow communication via said piston casing 3 when said piston 2 uncovers said outlet port 7. See particularly **Figure 1** of Harvey.

With respect to claim 23, **Harvey** teaches a method of setting an intermediate position of an actuator, the actuator including a fluidly movable piston 2 received in a casing 3 for sliding movement between first, second and third positions, the second position being intermediate the first and third positions, the method comprising the steps of: biasing said piston 2 towards said

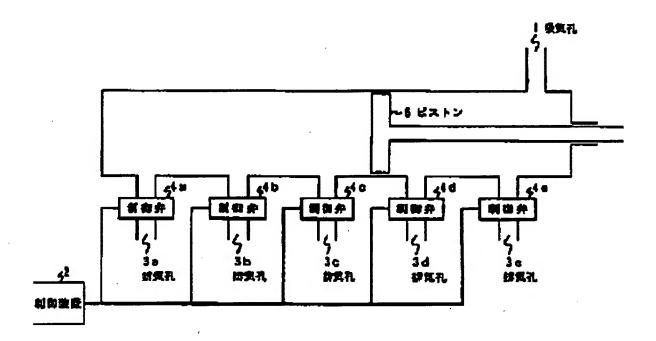
Art Unit: 3746

first position; directing a pressurized fluid into said casing 3 via a first port 6 to displace said piston 2 away from said first position; and opening a relief port 7 to permit pressurized fluid to flow out of said casing 3 at said second position once said piston 2 uncovers said relief port 7. See particularly **Figure 1**, column 1 lines 17-25, lines 29-34 of Harvey.

Note: The desired use recitation "compressor bleed valve" does not add any structure to the claim to distinguish the invention from the prior art being used. Thus, the desired used recitation does not add any patentable weight to the claim. Any apparatus/device comprising the positively recited structural limitations (a piston, a relief port and a piston casing) of claim 23, clearly would anticipate the invention as written, as is the case with Harvey's actuator.

Art Unit: 3746

3. Claims 1-5, 20, 21 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Masayoshi (JP 08074808).



With respect to claim 1, **Masayoshi** teaches an actuator comprising a movable piston 5 in a piston casing, the piston 5 being movable to a predetermined axial position set by a relief port 3c which is selectively openable for allowing incoming pressurized fluid to flow out of said piston casing as said piston 5 uncovers said relief port 3c. See particularly **Figure 1**, and abstract of Masayoshi.

Note: The desired use recitation "compressor bleed valve" does not add any structure to the claim to distinguish the invention from the prior art being used. Thus, the desired used recitation does not add any patentable weight to the claim. Any apparatus/device comprising the positively recited structural limitations (a piston, a relief port and a piston casing) of claim 1, clearly would anticipate the invention as written, as is the case with Masayoshi's actuator.

Art Unit: 3746

With respect to claim 2, Masayoshi teaches that the piston casing has first and second opposed end portions, and wherein said relief port 3c is provided at a location intermediate said first and second opposed end portions. See particularly Figure 1, and abstract of Masayoshi.

With respect to claim 3, Masayoshi teaches that the piston 5 is movable from one side of said relief port 3c to an opposed side thereof when said relief port 3c is closed. See particularly Figure 1, and abstract of Masayoshi.

With respect to claim 4, Masayoshi teaches that the actuator further comprises a control port 3e provided at a first end portion of said piston casing, said control port 3e being connected to a first valve 4e operable for allowing pressurized fluid to flow into and out of the piston casing . See particularly Figure 1, and abstract of Masayoshi.

With respect to claim 5, **Masayoshi** teaches that said control port 3e and said relief port 3c are in fluid flow communication via said piston casing when said piston 5 uncovers said relief port 3c. See particularly **Figure 1**, and abstract of Masayoshi.

With respect to claim 20, **Masayoshi** teaches an actuator comprising: a piston 5 slidable in a piston casing between first, second and third positions, said second position being intermediate said first and third positions, a first port 3e provided in said piston casing for allowing a pressurized fluid to be selectively supplied into said piston casing in order to displace said piston 5 from said first position to said third position, and a selectively openable outlet port 3c provided in said piston casing at a location corresponding to said second position, whereby when said piston 5 uncovers said outlet port 3c and said outlet port 3c is opened, the pressurized fluid flowing into said piston casing via said first port 3e is permitted to flow out of said piston

Art Unit: 3746

casing through said outlet port 3c, thereby causing said piston 5 to remain in said second position thereof. See particularly **Figure 1**, and abstract of Masayoshi.

Note: The desired use recitation "compressor bleed valve" does not add any structure to the claim to distinguish the invention from the prior art being used. Thus, the desired used recitation does not add any patentable weight to the claim. Any apparatus/device comprising the positively recited structural limitations (a piston, a relief port and a piston casing) of claim 20, clearly would anticipate the invention as written, as is the case with Masayoshi's actuator.

With respect to claim 21, Masayoshi teaches that the first port 3e and said outlet port 3c are in fluid flow communication via said piston casing when said piston 5 uncovers said outlet port 3c. See particularly Figure 1, and abstract of Masayoshi.

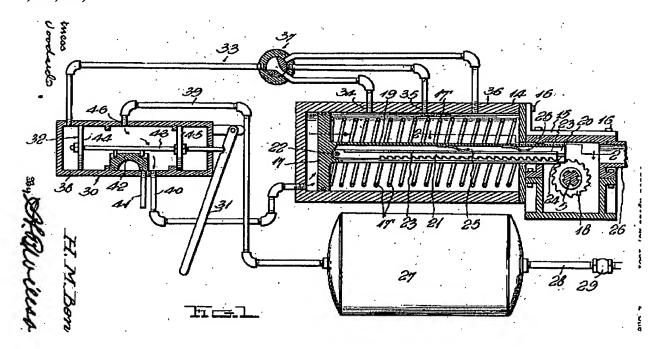
With respect to claim 23, **Masayoshi** teaches a method of setting an intermediate position of an actuator, the actuator including a fluidly movable piston 5 received in a casing for sliding movement between first, second and third positions, the second position being intermediate the first and third positions, the method comprising the steps of: biasing said piston 5 towards said first position; directing a pressurized fluid into said casing via a first port 3e to displace said piston 5 away from said first position; and opening a relief port 3c to permit pressurized fluid to flow out of said casing at said second position once said piston 5 uncovers said relief port 3c. See particularly **Figure 1**, and abstract of Masayoshi.

Note: The desired use recitation "compressor bleed valve" does not add any structure to the claim to distinguish the invention from the prior art being used. Thus, the desired used recitation does not add any patentable weight to the claim. Any apparatus/device comprising the

Art Unit: 3746

positively recited structural limitations (a piston, a relief port and a piston casing) of claim 23, clearly would anticipate the invention as written, as is the case with Masayoshi's actuator.

4. Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Bentley (U.S. 1,884,531).



With respect to claim 1, **Bentley** teaches an actuator comprising a movable piston 17 in a piston casing 14, the piston 17 being movable to a predetermined axial position set by a relief port 34 which is selectively openable for allowing incoming pressurized fluid to flow out of said piston casing 14 as said piston 17 uncovers said relief port 34. See particularly **Figures 1, 4**, and page 2 lines 96-101 of Bentley.

Note: The desired use recitation "compressor bleed valve" does not add any structure to the claim to distinguish the invention from the prior art being used. Thus, the desired used recitation does not add any patentable weight to the claim. Any apparatus/device comprising the

positively recited structural limitations (a piston, a relief port and a piston casing) of claim 1, clearly would anticipate the invention as written, as is the case with Bentley's actuator.

With respect to claim 3, **Bentley** teaches that the piston 17 is movable from one side of said relief port 34 to an opposed side thereof when said relief port 34 is closed. See particularly **Figures 1, 4**, and page 2 lines 96-101 of Bentley.

Allowable Subject Matter

- 5. Claims 11-19 are allowed.
- 6. Claims 8, 9 and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Contact information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Rodriguez whose telephone number is 571-272-4831. The examiner can normally be reached on Monday-Friday 7:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl J Tyler can be reached on 571-272-4834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Application/Control Number: 10/628,574 Page 12

Art Unit: 3746

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

William H. Rodriguez

Art Unit 3746